

Serial No.: 09/183,055

-2-

Group Art Unit: 1644

- 21
- a) activating a population of T cells by contacting said population of T cells with an anti-CD3 antibody; and
- b) stimulating an accessory molecule on the surface of the T cells with a ligand which binds the accessory molecule, the activating and stimulating steps thereby inducing proliferation of the CD8<sup>+</sup> T cells within the T cell population.

46. (Amended) The method of claim [45] 1, wherein the anti-CD3 antibody is an anti-human CD3 monoclonal antibody.

Sub H1

47. (Amended) The method of claim [45] 1, wherein the anti-CD3 antibody is immobilized on a solid phase surface.

Please add new claims 71 and 72 as follows:

Sub H1

71. The method of claim 1, wherein said anti-CD3 antibody is a whole antibody.

72. The method of claim 69, wherein said anti-CD3 antibody is a whole antibody.

### REMARKS

Applicants and their Attorney would like to thank the Examiner for the courtesy of the September 14, 2000 telephonic interview during which the foregoing claims were discussed. Claims 1 and 45-70 were pending in the application. In the present Amendment, claims 45, 48, 49, and 59-68 have been cancelled without prejudice, claims 1, 45, and 46 have been amended, and claims 71 and 72 have been added. Accordingly, after the present Amendment has been entered, claims 1, 46, 47, 50-58, and 69-72 will be pending. For the Examiner's convenience, the claims as will be pending after the present Amendment has been entered are set forth in Appendix A.

Support for the amendments to the claims can be found throughout the specification including the claims as originally filed. More specifically, support for new claims 71 and 72 can be found at, for example, page 11, lines 31-32 of the specification.

Serial No.: 09/183,055

-3-

Group Art Unit: 1044

No new matter has been added. Any amendments to and/or cancellation of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections and were done solely to expedite the prosecution of the application. Applicants reserve the right to pursue the claims as originally filed in this or a separate application(s).

### CONCLUSION

On the basis of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims are in condition for allowance. If a telephone conversation with Applicants' Agent would expedite prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617) 227-7400.

Respectfully submitted,



Maria C. Laccotripe, Ph.D.  
Limited Recognition Under 37 C.F.R. §10.9(b)  
Agent for Applicants

LAHIVE & COCKFIELD, LLP  
28 State Street  
Boston, MA 02109  
(617) 227-7400  
Dated: September 15, 2000

Serial No.: 09/183,055

-4-

APPENDIX A

1. A method for inducing CD8<sup>+</sup> T cells within a population of T cells to proliferate, comprising:

- a) activating a population of T cells by contacting said population of T cells with an anti-CD3 antibody; and
- b) stimulating an accessory molecule on the surface of the T cells with a ligand which binds the accessory molecule, the activating and stimulating steps thereby inducing proliferation of the CD8<sup>+</sup> T cells within the T cell population.

46. The method of claim 1, wherein the anti-CD3 antibody is an anti-human CD3 monoclonal antibody.

47. The method of claim 1, wherein the anti-CD3 antibody is immobilized on a solid phase surface.

50. The method of claim 1, wherein the accessory molecule is CD28.

51. The method of claim 1, wherein the ligand is an anti-CD28 antibody.

52. The method of claim 51, wherein the anti-CD28 antibody is an anti-human CD28 monoclonal antibody.

53. The method of claim 1, wherein the accessory molecule is CD9.

54. The method of claim 1, wherein the ligand is an anti-CD9 antibody.

55. The method of claim 54, wherein the anti-CD9 antibody is an anti-human CD9 monoclonal antibody.

56. The method of claim 1, further comprising contacting the T cells with an antigen or portion thereof.

57. The method of claim 1, further comprising

- c) monitoring proliferation of the T cells in response to continuing exposure to the ligand; and

Serial No.: 09/183,055

-5-

Group Art Unit: 1644

d) reactivating and re-stimulating the T cells when the rate of T cell proliferation has decreased to induce further proliferation of the T cells.

58. The method of claim 57, further comprising repeating the steps (c)-(d) to produce a population of T cells increased in number of from about 100- to about 100,000-fold the original T cell population.

69. A method for stimulating CD8<sup>+</sup> T cells within a population of T cells to proliferate, comprising:

a) contacting a population of T cells with an anti-CD3 antibody, an anti-CD28 antibody, and an anti-CD9 antibody, under conditions appropriate for proliferation of the T cells;

b) separating the anti-CD3 antibody from the T cells and the anti-CD9 and the anti-CD28 antibody;

c) monitoring proliferation of the T cells in response to continuing exposure to the anti-CD9 and the anti-CD28 antibody; and

d) re-stimulating the T cells with the anti-CD3 antibody and the anti-CD9 and the anti-CD28 antibody when the rate of T cell proliferation has decreased to induce further proliferation of the T cells.

70. The method of claim 69, further comprising repeating steps (b)-(d) to produce a population of T cells increased in number of from about 100- to about 100,000-fold the original T cell population.

71. The method of claim 1, wherein said anti-CD3 antibody is a whole antibody.

72. The method of claim 69, wherein said anti-CD3 antibody is a whole antibody.